

Pyle (W.L.)

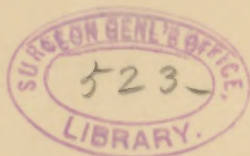
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**FOUR CASES OF OPIUM-POISONING IN
WHICH POTASSIUM PERMANGANATE
WAS ADMINISTERED.**

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HAVING had, within the last year, a number of cases of attempted suicide by morphin-poisoning, after the publication of Dr. Moor's article in the *Medical Record*, February 17th, on the antidotal action of potassium permanganate in morphin-poisoning, a natural interest was felt to try its efficiency in our cases, which as a rule have been the least amenable to treatment of any of our emergency-cases. This, however, is generally due to the length of time after the ingestion of the alkaloid that the patient is admitted. It is of course an easy matter to rid the stomach of lethal doses of morphin within a few minutes after ingestion, and combat the subsequent symptoms, but only one who has labored with a case several hours old can appreciate the difficulty and work required to combat the effects of the absorbed poison. It was in such cases that we were particularly desirous of testing the antidote, as therein its greatest value would lie, particularly in cases of attempted suicide, in which the dose is usually taken in a locked room, or in some place not readily accessible, or in which early discovery is not likely to be made. Any remedial measure within reason is worthy of trial; in fact, one so extreme as tracheotomy and artificial respiration by means of wind-bellows should be considered advisable in a case not responding to other measures.



Through the courtesy of my chief, Dr. George Byrd Harrison, I am able to present the following cases :

CASE I.—James S., a white, male clerk, fifty-seven years of age, was, at 7 A.M., April 11th, heard to go into his bath-room and return to his bed-room, and lock the door. Being accustomed to sleeping late, having recently been ill, he was not disturbed until about 1.30 P.M. After getting no response to repeated knocks on the door, his room was entered by the window, and he was found unconscious in his bed, with an empty vial of morphin-sulphate pills, gr. $\frac{1}{8}$, by his side. A physician was hastily summoned, who administered atropin, and called the hospital-ambulance. The man was brought in about 2.30 P.M. Just how long after taking the morphin he was admitted we could not say, but as he usually arose before 9.30 A.M., we have good reason to believe that it was before that time. Assuming this correct, he reached the hospital five hours after the alkaloid was taken. He was in a state of collapse, his body cold, his face almost purple, and his pulse, heart-action, and reflexes were absent. His pupils were contracted to the size of pin-points, and altogether the case looked hopeless. The stomach-pump was employed and the gastric contents removed, and replaced with a solution of potassium permanganate, 6 grs. to 6 oz. of water. This was removed, and a similar solution re-introduced. Continued hypodermatics of strychnin to a total of gr. $\frac{1}{10}$, and atropin to gr. $\frac{1}{20}$, caffein to grs. 6, were given. Artificial respiration was practised, and the man was given several hot foot-baths, and catheterized.

The permanganate was given in the arms hypodermatically, but the enfeebled circulation rendered this, as well as all other hypodermatic administration, rather inoperative. Faradization was tried, with no avail. About 4.30 P.M., about two hours after admission, we were somewhat encouraged by the man's condition. The conjunctival reflexes returned, as well as the reflexes of

the soles of the feet. The condition remained the same, although constant friction and massage rendered the circulation more appreciable. Anal dilatation was tried, but about 9.20 P.M. cyanosis returned, respirations were abolished, and a fatal issue ensued.

CASE II.—Harry M., a white male, an ex-pugilist, twenty-two years of age, in a fit of despondency after a debauch, in which he admits having taken repeated doses of morphin sulphate, at 4.15 P.M., April 16th, took three teaspoonsful with suicidal intent. The ambulance was called shortly after he fell in the street, and he arrived at the hospital at 4.45, thirty minutes after taking the drug. Artificial respiration was practised, and hypodermatic injections of atropin were administered in the ambulance. On arrival at the hospital his respirations were shallow, and not over two a minute—virtually slight gasps. His pulse was slow and full, his pupils pin-point in size, and his face and lips cyanosed. His forehead was cold, and bore a profuse perspiration.

Artificial respiration was continued by Sylvester's method. The contents of the stomach were removed by the pump, and a solution of 6 grs. of potassium permanganate to the pint of water was introduced, and it in its turn removed and replaced by 8 oz. of a half gr. to the ounce solution. Repeated hypodermatic injections of strychnin, caffenin, and atropin were given, as in the previous case. The feet were placed in pails of hot water, and then douched with cold. We then gave, hypodermatically, five injections of one grain to one ounce solution of the permanganate, three in the arm and two in the leg. Friction and massage were vigorously practised, and the chest and face were alternately lashed with hot and cold towels.

After twelve minutes of this treatment the man regained consciousness, and was given a pint of strong, hot coffee. He continued well for about ten minutes, and then suddenly again became asphyxiated and cyanosed.

There seemed to be a spasmodic closure of the larynx. The treatment was continued, the tongue was drawn forward and the throat cleansed. Anal dilatation was also tried. Finally a hypodermatic injection of atropin, gr. $\frac{1}{60}$, was given directly over the larynx, and some signs of respiration returned. The man gradually improved, the cyanosis disappeared, and the reflexes rapidly returned.

Consciousness was regained again after twenty minutes' vigorous treatment. The man was given 4 ounces of the solution, and this was followed by copious draughts of strong, hot coffee. As he seemed to be doing well, he was dressed, walked about, and constantly awakened, as he was about to fall asleep every other minute.

Shortly after midnight he was taken to the hospital-ward and allowed to sleep for about half an hour. During this time his respirations had been strong and full, about twelve to the minute, and after being awakened easily he was allowed to sleep all night. The next morning he felt well enough to dress himself, and complained of nothing but a little soreness and weakness, naturally resultant upon such vigorous treatment, in which the energies of the whole hospital-corps were well-nigh exhausted. On the following day he was discharged perfectly well.

Another interesting feature of this case was the sensation of intense itching which developed. This, in itself, kept him from falling asleep for quite half an hour.

CASE III.—Nettie H., a white female, twenty-five years of age, a prostitute, while on a debauch took half an ounce of laudanum with suicidal intent. The dose was taken about an hour before the ambulance was called. Meanwhile an attending physician, who was immediately summoned, had induced her to drink about two grains of the permanganate in solution, and had administered atropin sulph. gr. $\frac{1}{60}$. On admission she was cyanosed, her respirations were shallow and slow, and about eight per minute. The pupils were contracted, but not to the

size of a pin-point; consciousness was lost, the pulse was slow and full, and the conjunctival reflex was present.

The stomach-pump was employed, as in the previous cases, being preferable to any emetic, particularly one of central action, which very often fails to act; indeed, apomorphin I have seen act almost identically in the same manner as morphin, producing narcosis rather than emesis.

The gastric contents were removed and replaced by 8 grs. of permanganate in ℥viii of water, slightly acidulated. Five syringefuls of this solution were also given hypodermatically, and stimulants, as in the foregoing cases, were administered. After fifteen minutes of treatment the woman regained consciousness, but lapsed into stupor, attributable, no doubt, to alcoholism. She was taken to the ward, showed no dangerous symptoms, in fact, none other than those generally subsequent to a debauch, and was discharged the following day.

CASE IV.—Sadie H., a female mulatto, twenty-one years old and a prostitute, at about 9 P.M., May 3d, bought a mixture of glycerin, f℥ij , and laudanum, f℥ij , took the contents, entire, outside of the drug-shop, and fell on the street on her way home. She was picked up, placed in a carriage and brought to the hospital, arriving about fifteen minutes after taking the mixture. On admission she was unconscious; her pupils were contracted, but respiration and cardiac action were but slightly affected. The reflexes were considerably lessened. The stomach-pump was immediately employed, and the woman regained consciousness sufficiently to drink a solution containing six grains of the permanganate. Apomorphin, gr. $\frac{1}{10}$, was then given hypodermatically, and the contents of the stomach, *i. e.*, the permanganate solution, were ejected, being light-brown in color.

In a half-hour after admission the woman was well enough to be taken home in a carriage by friends, and little the worse for her dangerous experiment.

